Patent claims

1. Agent for substitution of the blood plasma,
c h a r a c t e r i s e d b y t h a t
it is formed by the vegetal protein substance edestin.

2. Agent for substitution of the blood plasma according to the claim 1,
c h a r a c t e r i s e d b y t h a t
it is a product of hemp seeds.

3. Agent for substitution of the blood plasma according to the claim 1 or 2,
c h a r a c t e r i s e d b y t h a t
it is a component of a solution comprising 5 % - 40 % in weight of edestin, 0.5 % - 7 % in weight of inorganic substances, 0.5 % - 7 % in weight of organic substances, hormones and other substances to 100 % in weight of the colloid solution.

4. Method of production of the agent for blood plasma substitution according to the claim 1,
c h a r a c t e r i s e d b y t h a t
the vegetal seeds are either cold-pressed or ground to powder and extracted under a compressed gas; the pressed out or extracted oil is separated, the pressed together or extracted seeds are extracted by action of the organic solvents for relief of fat and color, the fat relieved and decolorized substance is then filtered out and exposed to action of the inorganic salts in the water solution and at the temperature

20 °C - 60 °C, the solution is filtered and edestin is finally isolated from the filtrate.

5. Method of production of the agent for blood plasma substitution according to the claim 4,
c h a r a c t e r i s e d b y t h a t
the hemp seeds are subjected to the cold pressing and grinding processes and to a gas-assisted pressure extraction.

6. Method of production of the agent for blood plasma substitution according to the claim 4 or 5,
c h a r a c t e r i s e d b y t h a t
the vegetal seeds are being extracted under the compressed carbon dioxide.

7. Method of production of the agent for blood plasma substitution according to one of the claims 4 - 6,
c h a r a c t e r i s e d b y t h a t

- a saturate solution of the inorganic salts at the temperature 20 °C - 60 °C, 20 °C advantageously is added to the fat relieved and decolorized substance;
- the resulting mixture is then being stirred for 0.01 - 2.5 hour (0.5 hour advantageously) at the temperature 20 °C - 60 °C, 20 °C advantageously;
- 0.1% - 30% in weigh of inorganic salt is added;
- the resulting mixture is then being stirred for 0.6 - 60 minutes, 30 minutes advantageously, at the temperature 20 °C - 60 °C;
- filtrated by means of chemical filters;
- the filtrate is sharply cooled down to -50 °C - +15 °C in order that edestin would coagulate in a crystal form;

- edestin raw crystals are poured into the distilled water and separated by pressure filtration;
- the resulting filtrate is used to make a water solution with edestin or the fat relieved and decolorized substance,

or

- by adding water to the fat relieved and decolorized substance, a water solution of the temperature 20 °C - 60 °C, 5 °C advantageously, is formed;
- an inorganic salt, such as sodium chloride advantageously, is added to the water solution to give 1% - 20% solution, 5% solution advantageously;
- the mixture is being stirred intensively for 1 - 60 minutes, 30 minutes advantageously;
- it is left to settle down and sediment for the protein sediment separation;
- the protein sediment is filtered;
- in the filtrate, edestin in the form of a solution is isolated by action of a salt, ammonium sulfate advantageously

and in both cases the edestin is further purified by means of dialysis or column chromatography up to the purity level higher than 95 % (99.9 % advantageously).